INFORMATION CONTROL AND THE UNITED STATES AIRLINE INDUSTRY: The Newest Version

Written testimony before the National Commission to Ensure Consumer Information and Choice in the Airline Industry

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I want to thank the commission for the opportunity to give written and oral testimony based on my research of the US airline industry. I would also like to thank the Universities and Grants Program at the Department of Transportation where I was an Eisenhower Fellow, 1999-2001. The Eisenhower graduate program supported the majority of the research highlighted in this testimony.

BACKGROUND

First I would like to briefly explain my research background to the commission. I am an assistant professor in the International Development Program, in the Department of Economic Development at The University of Southern Mississippi. I am also President of Butler and Associates, Inc., a consulting firm. I have been actively researching the US airline industry for the past eight years and have followed the industry since 1985. It is my intention to provide the commission with highlights from my research, and the logic that underpins the findings, in the hope that this neutral information can be used to make the most informed decisions possible. I have also read the testimony provided to the commission to date and have responded to relevant pieces within this testimony.

DISCLAIMERS

In the spirit of full disclosure, I want to inform you that I own 51.224 shares of Southwest Airlines stock, all of which was purchased after the research was complete. I am also a card-carrying Northwest Airlines frequent flier. I do not directly own shares of any other airline, computer reservation system/global distribution system (CRS/GDS), or travel agency or travel distribution web site. Furthermore, I am not currently on a retainer by any of the interested parties...yet. In short, at present, I have no strong economic or political stake in the final text of the commission, just a desire to inform the committee on my research findings.

QUICK FOCUS ON EACH SEGMENT

I would like to briefly describe my view of each of the segments that have been under scrutiny during the three previous hearings by the commission -- the airlines, the CRSs/GDSs/airline ticket distribution web sites, travel agents and the consumer.

Airlines-I have been fascinated by the airlines since I was a child. Much of my free time as a youth was spent reading Aviation Week and Space Technology and watching airplanes take-off and land at the end of runways or on top of terminals at Intercontinental Airport in Houston, Texas (now Bush Intercontinental). I still hold much respect and admiration toward historic leaders within the US airline industry such as C. R. Smith, Juan Trippe, Robert Crandall, Max Hopper and Herb Kelleher.

CRSs/GDSs and Web sites for ticket distribution-Besides airlines; information technology is the second major area of my research, and in particular the adoption of information technologies by airlines. CRSs/GDSs and Web sites that distribute airline tickets hold an interest for me because these systems and I have a very similar purpose, to collect information and understand patterns of consumer behavior. The CRSs/GDSs collect consumer data; plug the information into algorithms creating yield management tools to increase profitability for airlines. I collect data and information on people to understand behaviors and hidden patterns for the purpose of intellectual curiosity and dissemination.

Travel Agents-Entrepreneur is the best and most accurate description of these business owners. Travel agents, in testimony before this commission, have been (mis)characterized in many different forms. At the basic level, travel agents and travel agency owners are classically American entrepreneurs. Most agents I know enter into the business because of their love of travel hoping to make their love contagious to customers. These agencies, like many other small businesses, hire employees, pay taxes and attempt to maximize their profitability. You can find travel agents and agencies from small towns to large cities through the US, and as importantly, in every US congressional district.

Consumer-Consumers are an all powerful purchasing force that can both sustain and build corporations while at the same ignoring other businesses to that industry's demise. Though specific individuals make both informed and less informed decisions, in aggregate, consumers make decisions based on the information they have at their easy disposal, no matter the quality or quantity. I do not consider consumers dupes, no do I believe them to be thoroughly educated about all purchases. Consumers are efficient. They work with the maximum information gathered in the shortest time to create an opinion about a purchase. Consumers do not believe everything they are told through marketing, but the consumer can be swayed with a solid marking plan with a good product.

AIRLINES AS A UNIQUE INDUSTRY

Historically, US airlines have been treated as a special industry by the US government. The reasons for this special treatment are multi-fold.

- 1. US airlines evolved from government subsidized airmail carriers.
- 2. Airlines have always been perceived as a ready reserve of military transport.
- 3. Airline pilots are also viewed as a ready reserve of pilots for the military.
- 4. Airlines are a symbol of wealth and power both at home and abroad, and are considered to be an effective means of "showing the flag" overseas.
- 5. Airlines exist as one element of continued economic development in almost all congressional districts within the US.
- 6. US airline ownership is restricted in terms of nationality. US airlines, by law, can only be majority-owned by American nationals; sealing US interests in all matters of national security (see 1-5 above).

Because of its unique position, airlines are granted certain privileges by elected and government officials. Most recently this was manifested by the large grants and guaranteed loan packages offered to the airlines post September 11, 2001. Many other industries that were negatively impacted by 9-11 did not receive as much attention.

BUSINESS PHILOSOPHIES

Two different business philosophies exist in the US airline industry. One is what I call premium pricing the other is what I characterize as discount pricing. Premium pricing is practiced by the large hub-and-spoke airlines while discount pricing is a philosophy of airlines such as Southwest. The fundamental underlying principle dictates how the airline collects and chooses to use information. In premium pricing, an airline attempts to maximize profit for each seat sold. This means the airline attempts to obtain the highest possible price possible for all seats. Since it is not possible to get all consumers to pay top dollar for every seat, airlines then must begin to lower the cost of a seat, or groups of seats, until each seat is sold. In this manner, the airline has achieved ideal yield management where it has obtained the highest dollar amount from each customer possible for each seat sold. This type of yield management is highly information dependent since the airline needs to know the maximum amount of information about each customer possible to determine the maximum each customer is willing to pay to fly between two locations (Crandall 1995).

Southwest Airlines practices what I call discount pricing. Instead of trying to determine how much revenue they can obtain from each aircraft seat, Southwest determines what the minimum amount they can charge per seat while still maintaining a profit. I call this the Wal-Mart pricing plan where the company always seeks new ways to sell products/seats at a lower price. In order to continue to discount prices, the company expands operations and improves efficiencies. Information is also critical for a Wal-Mart pricing strategy, but focuses less on the maximum the consumer is willing to pay and more on the potential market for any given city pair if the price of an airline seat drops below a certain level. Likewise, with the Wal-Mart pricing plan, Southwest must constantly examine its own overall cost structure to ensure that the airline offers the lowest ticket prices possible. This philosophy is exemplified by Southwest Airlines' gradual expansion, even after September 11, 2001, as well at its low cost per seat mileconstantly one of the lowest in the industry. Each business philosophy, premium pricing and discount pricing, influences many strategic airline decisions including how each distribute their tickets.

INFORMATION TECHNOLOGY DEPENDENT AIRLINES

Airlines are the second most dependent industry on information technologies within the US, the first being the financial industry (Hopper 2000). Because of its dependence, airlines are quick to adopt new technologies to improve efficiencies that are expected to translate into cost savings. This dependence is exemplified by the airlines adoption of early mainframe computing, the creation of the CRSs/GDSs, Web ticketing, and eticketing. The fact that airlines are uniquely dependent on information collection, processing and distribution cannot be emphasized enough when examining airline strategy.

Please realize that "unbiased" or "neutral" technologies DO NOT exist. Technologies are created, used and manipulated by biased people and leveraged for specific purposes. Some airline will be listed at the top of the screen; someone's banner will be run as an ad. Given this reality, any other technology that multiple companies in an industry leverage cooperatively should raise suspicions on the part of oversight agencies.

Airline Costs-Airlines have four major components that account for the majority of their costs structure. These costs are aircraft, fuel, labor and ticket distribution (not necessarily in that order). Examining airline annual reports overtime indicate an interesting consistency of these cost factors across the industry (Butler 2001). If airline executives decide to cut costs, a logical starting point would be the top four costs within the airlines. The executives must decide if they can cut aircraft, fuel, labor and distribution? The answer to cutting aircraft is NO because aircraft hold the seats that are sold in order to generate revenue. Cutting aircraft, especially on a hub and spoke system, is a formula for decreasing revenues, not cost savings. Fuel costs are not controlled by the airlines, except in their ability to hedge on fuel prices, but this to be only a temporally limited option—if successful. Labor costs are high in airlines, mostly due to the nature of the work and the unionized work force. The majority of the labor costs are for pilots and flight attendants, each governed by a different union organization. Negotiating contracts with pilot and flight attendant unions can cause pre-mature graying, thus this option is not

a popular one when looking for costs savings at an airline. With advance in telecommunication technologies, executives found a means to decrease ticket distribution costs. This was a logical response by airlines to leverage the information technologies they are so dependent upon.

From Res to Web Ticketing-Airlines have used a variety of ticket distribution channels throughout their existence. From the onset, airlines sold tickets at the airports they served. Later the ticket counters evolved into back-room reservation centers with banks of phones. A sea change occurred after deregulation. As airlines scrambled to build their hub and spoke networks along the regulated city market pairs they served, they needed many more aircraft and thus many more passengers. Because of their larger geographical focus, each new hub airline needed to feed as many passengers as possible through its hubs via its spokes, and not lose customers to the competition. Airline reservation centers at the time were not of sufficient size or capability to serve the rapidly expanding needs of the airlines. The airlines sought out the travel agents as ticket distribution force because

- 1. they existed and could immediately be brought into service
- 2. they were in most communities the airlines served
- 3. the travel agencies would absorb the initial start-up costs saving the airlines money they were spending at airports and on new aircraft

Basically, the airlines chose to outsource ticket distribution after deregulation. Since each airline was in the processes of developing their hubs and trying to draw customers and earn bran loyalty, airlines quickly bid up the commission rates to travel agents (See ASTA Testimony).

To increase both the efficiencies of the airlines in terms of yield management and the travel agents in terms of tickets sold per agent, the airlines independently created CRSs replacing the huge paper volumes of flight schedules. These systems also locked travel agents into contracts with airlines, indirectly through the CRSs and the Airline Reporting

Corporation (ARC). Though outsourced, airlines now had some indirect control over their ticket distribution system by owning the technology that the agents depended upon.

Airlines began to cut commission rates in 1994/95. If one airline cut commission rates, others followed. This created an environment where each would have a statically equal chance of not losing a travel agent and their customers. Therefore, each airline saved money, and none lost passengers to the other, a solid win for the airlines. In fact, after the first rounds of commission cuts, tickets sold by travel agents actually increased due to the economy and the need for travel agencies to make up the difference in commission rates (Hopper 2000). The mid 1990s also brought the Web as a realistic opportunity for airlines to regain total control over their ticket sales and distribution mechanism.

Web ticket was found to the be the most cost efficient means of selling tickets, and with cost savings from the already established e-ticket distribution system which require no paper to be printed, mailed, collected, and sorted, cost saving, the Web became an ideal selling platform. While the cost of a travel agent or reservation center was about equal for ticket distribution (\$8-\$10 each ticket), Web ticket distribution could cost as little as \$2 a ticket (Kelly 2001, Crandall 2000). When multiplying the millions of ticket sold each year, this form of ticket distribution offered substantial savings. Thus airlines, through various carrots and sticks, started to attract customers to their web sites and away from their own reservation centers and travel agents. Carrots included extra frequent flier miles, lower ticket costs and faster service. Sticks included, lower commission rates for travel agents, surcharge for tickets not sold on an airline's web site, and not having access to the lowest fares available. The movement away from travel agents and airline owned reservation centers continues. Encouraging customers to go to their Web site and purchase tickets is a logical response by airlines to a new technology that allows them to save substantial money on and begin to control the means of ticket sales and distribution.

The Tom Sawyer Effect©

Why is Web ticketing less expensive than a reservation center or travel agent? Two words—LABOR COSTS. A travel agent must meet expenses, as do reservation centers,

and the majority of the costs to operate these sites are in recurring labor costs. When a ticket is purchased through a Web site, the seller saves the labor cost because most labor costs is shifted directly to the consumer (Kelley 2001). It is the consumer who purchases the computer, software, and an ISP connection. It is also the consumer who searches the multiple web sites for the "best deal", enters their seat assignment, credit card number, and prints out their e-ticket confirmation on their printer. A large percentage of the labor costs built into cost of distributing an airline ticket is now outsourced directly to the consumer, thus enabling a \$1-\$2 transaction cost for airline is tickets via the Web. The saving to airlines, and the costs to consumers collectively, are staggering. Assume it takes a person 30 minutes to find, reserve, and pay for a ticket online, and the average per hour wage is \$8 per hour. Multiply \$8 an hour times the millions of tickets sold over the Web and it is easy to see why an airline, and other industries, would actively seek out this distribution channel.

I coined the Tom Sawyer Effect© because I believe that smart companies with good marketing have sold the Web to consumers as a fast, efficient, and fun way to purchases goods and services, just as the character Tom Sawyer convinced his peers to whitewash the fence through skillful marketing, manipulation and psychology. However, is the utilization of The Tom Sawyer Effect© for ticket sales and distribution in the consumer's best interests long term? Web distribution and the Tom Sawyer Effect© I consider to be a positive development in leveraging a technology. However, it is only positive because it enables one more distribution channel. If airlines were to attract all customers to Web sites with lower fares, then remove all other distribution channels (i.e. competition), they could/would raise fares with monopoly control over a single distribution channel. This scenario would be very negative for the consumer because the time they would spend on the Web seeking savings would become an embedded requirement without lower fares, not just one of many options as it is today.

TRAVEL AGENTS MISTAKES

Travel agents collectively have made some strategic errors over the past 30-40 years that have, in part, led to the circumstances they find themselves in today. The first error was

not to develop what came to be known as the CRS. Travel agents were on the verge of initiating such a project, but were convinced that airlines could provide a superior product, faster and more economical, than the travel agent industry. Though this was probably true, the travel agent industry lost a strategic advantage, controlling airline ticket inventory and distribution, when they deferred to the airlines (Hopper 2000).

A second error occurred after the airlines began to develop a joint CRS then eventually individual CRSs. At the initial stage of development, the travel agent industry was offered partial ownership of this technology, which they rejected (Hopper 2000). Ownership would have provided travel agent input in the creation of the technology, a share of the profits from the developed technology, and would have slowed or prevented the airlines use of the CRS as a controlling mechanism over the agents.

The third strategic error is the belief many agents had, and still have, that they were equal partners with the airlines. What many agents failed to understand is that 1) the airlines controlled many agencies in terms of revenue stream and 2) that partnerships exist only when a mutual benefit exists. The airlines, through high commissions and overrides, enabled many agencies to exist and prosper. Once the mutual advantage disappeared, airlines mixed commission cuts and Web distribution quickly disassociating themselves with their traditional ticket distribution force.

ORBITZ

Orbitz has been characterized in many different manners in the testimony before this commission. In reality, Orbitz's purpose is multifaceted and should not be construed as being only one thing or another. At minimum, Orbitz is

- 1. A late attempt at the large airlines to take advantage of the previously active IPO market.
- 2. A less expensive means to distribute airline tickets on the Web (compared to a GDS).

- 3. A means of consumer data collection for yield management when the airlines continue to sell off their positions in GDSs.
- 4. A means of collecting data on other airlines fare/frequencies/schedules, which direct airline Web fares do not allow.
- 5. A more efficient means of producing premium pricing for airline tickets of the airline owners.
- 6. Competition for Travelocity.com and Expedia.com.
- 7. One more venue for airlines to distribute their tickets in order to access as many different population segments possible.
- 8. A means of airline-owners taking control/ownership of their ticket distribution channels.

Orbitz serves all of these functions and probably more. Orbitz has lost large sums of money over the past several quarters and the five large airline-owners have chosen to keep Orbitz afloat and not pull the plug. This means that Orbitz is seen as having value, especially long-term. This may be in the form of an IPO, but given the market conditions, it is an iffy bet. More likely though Orbitz as a data collection and distribution mechanism for the airlines is worth more than the sum of the ticket revenue costs which show up on Orbitz's balance sheet. In fact, critical questions are what is the direct and indirect value of

- 1. challenging the dominance online of Travelocity.com and Expedia.com for airlines? More competition, which is good for the consumer.
- 2. having a less expensive GDS for distribution for airlines? Good for consumers, only if there are multiple GDS options in the marketplace. If Orbitz owner-airlines choose to separate themselves from the traditional GDS such as Sabre and Worldspan and push/pull all distribution to Orbitz, this would be very detrimental to the consumer due to the restricted competition.
- 3. a tool that allows each of the five airline owners to share data on pricing to maximize yield management? Airlines have used the GDS technology for this type of price signaling in the past (See DOJ), and with a more powerful and

flexible platform in Orbitz, one can expect airlines to continue to use this practice since it enables their philosophy of premium pricing.

Because of the absolute reliance of hub airlines on information and information technologies to keep its premium pricing philosophy in place, the true cost savings of Orbitz cannot be found within just the Orbitz LLC but within each of the airline-owners cost sheets.

...the greater their [technology owner's] penetration, the greater their competitive advantage. In many contexts this has resulted in room for only one standard worldwide... Whoever owns that standard, even if only in the most indirect of ways, has the opportunity to extract enormous value. This creates a strong incentive to invest in creating such as standard, to ally with others to increase the chance of acceptance, and if necessary, to give away 99 percent of its propriety content to capitalize on the sliver of advantage that remains (Evans and Wurster p. 35)

This is a quote from the book *Blown to Bits: How the New Economics of Information Transforms Strategy*. Interestingly, the authors of this book are with the Boston Consulting Group, the same group hired by the airlines to create Orbitz suggesting that Orbitz, at conception, had this philosophy embedded within its organization. This means that the Orbitz technology and abilities reflect the desire of the owner-airlines to set one standard in the industry and to extract "enormous value."

On June 27, 2002, DOT released its report to congress on Orbitz. In the report, which reads more like my original draft testimony, the DOT makes no conclusions and instead chooses to wait/defer to the DOJ. Orbitz has been under scrutiny by both the DOT and DOJ since before its launch. During that time, Orbitz has been careful not to aggressively act in any way that would give oversight agencies reason for concern, hoping they will eventually leave. The relationship between DOT/DOJ and Orbitz is not unlike when a police car is on the road nearby and I drive the speed limit. Of course I drive the speed limit, the enforcement police are watching me. However, after the police exit the scene I resume the speed my automobile technology enables me to go, which is above the speed limit. Likewise, Orbitz, upon the DOT and DOJ leaving the scene will use their

technology to the maximum benefit of the airline-owners, and to the detriment of the consumer. This is why I would recommend that the police enforcer stay on the road to ensure the safety of all consumers/drivers sending the correct signal of oversight or choose to remove the driver from the road all together as a detriment to others on the road.

IDEAL VERSUS THE REAL WORLD

Ideal

Airlines-The ideal world for any company, including an airline, is to have monopoly control over a market where the maximum price can be charged for an airline seat and all seats are full. Any airline acting in their own and their shareholder's best interest will do everything legal to strategically move their company toward maximum market share possible.

Consumers-The ideal world for a consumer is to have many companies in the same business all competing for the customer's dollars. Each company will lower its prices, use as many distribution channels possible, and increase service to attract customers. As the companies compete, prices are driven down and service is driven up, allowing the consumer several good choices for any particular product.

As you will notice, the ideal worlds of the airline and the consumer are often antithetical. This means that hub airlines are, quite correctly in the business sense, moving towards monopoly or oligopoly control. Consumers are on the other end of the spectrum where they gain the greatest value from multiple players on a level playing field, both in airlines and airline ticket distribution choices. It is exactly in this canyon separating these two extremes where the role of a government oversight agency should exercise its power and influence to ensure that the market reflects the most options for the consumer.

Real

Airlines-Most of the large hub and spoke airlines control specific geographical territory as a holdover from the era during regulation and city-pair service. For example, Northwest Airlines has a dominant presence in Memphis, Tennessee, Detroit, Michigan and Minneapolis, Minnesota while other airlines have their major hubs. Because one airline controls a sizeable portion of the flights in and out of these large hub cities, these airports are often described as fortress hubs. To compete against a fortress hub airline is very difficult for many reasons. One, the fortress hub airline controls many of the "best" landing and take-off slots as well as gate space. Two, DOT records show that when a airline tries to compete with a fortress hub airline on price on a set of city pairs, the hub airline will lower their price to or below the new airline's price to the same destination and often triple or quadruple the number of flights to the same destination (DOT). Short term, this is considered competition. Long term, the deep pockets of the hub airline allow it to outlast the new competition, even at a loss on flights, until the new airline pulls service or goes out of business. At which time the hub airline raises prices again and decreases flight frequency on the city pair route. The dominant airline is able to starve out the new competition due to its overwhelming presence.

Most major hubs carriers chose not to compete head to head at each other's hubs. The reasons are rationale. A new airline would enter the market with lower fares and more flights; the dominant hub airline would lower prices and increase flight frequency on the same city pairs as the new competition. In the end, each airline would lose much money on these flights; all the while the consumer is enjoying the inexpensive tickets and high flight frequency. Because of the lose-lose business scenario many "discount" airlines that have tried, and often failed, to enter hub markets. When hub airlines chose to compete head to head, one airline will lower many of its fares, and especially in those markets where more than one airline serves, often called "price wars". All hub airlines matched the lowered ticket prices in order to avoid loosing customers to the competition. When the hub airlines follow suit, customers enjoy inexpensive air travel and airlines go deep into the red. For the airlines, "price wars" become a zero-sum game in terms of gaining passengers from other airlines since every airline prices the routes almost identically, so statistically every airline would keep, loose and gain the same number of

passengers. Pricing wars once again reaffirmed to the airlines that staying within their hubs and using premium pricing is the best business model for success.

Consumer-If you are consumer in a fortress hub airline city, your airline choices are few and the prices you pay are higher than on routes with more competition, especially for the last minute business traveler. This is due to the lack of competition at that airport on specific city pairs. At present, the best possible scenario for consumers is Southwest Airlines and similar discount carriers. Southwest, with its business philosophy of discount pricing, can enter a market and drive down overall prices on specific routes by offering lower fares. Local hub airlines have to lower their prices to match Southwest's fares and frequency and hope that their frequent flier mileage programs and marketing keep customers loyal. Southwest has been successful at creating sustained competition at major cities. Likewise, because Southwest is an established airline with deep pockets, fortress hub airlines cannot use the same tactic of starving out the airline as they do with smaller and newer start-up discount carriers. In fact, since Southwest makes a profit on its discounted flights, an airline trying to starve out Southwest would only starve itself. For the consumer Southwest Airlines and similar carriers are the key to inexpensive, safe and good service. For hub airlines, Southwest is the major threat to their safe and profitable hub networks. The positive benefits for consumers when a discount carrier like Southwest enters and sustains themselves in a market are clear. In this model when of multiple airlines serving the same city pairs, best serves the consumer both short and long term. This forces airlines to compete head-to-head with lower fares, better service and pushing the technology and customer service envelope in terms of in operational improvements.

POSITIONING

Airlines-For the foreseeable future, the major hub airlines will continue along the long road of deregulation toward consolidation. The author believes that the US will end up with three major hub airlines, however, which three is hard to guess. As the US automobile industry in the 1970s and early 1980s demonstrated so nicely, three or four big companies dominating a market without competition leads to low levels of

competition, if any, a low quality product, and a level of arrogance on the part of the companies, all bad for consumers. Decisions post-September 11, 2001, by airline executives will set the stage for which hub airlines will succeed and which will be absorbed by other carriers. Besides the big three, it is expected that Southwest Airlines will continue its steady pace of expansion. Older discount carriers and newer entries such as Jet Blue are also a variable in the equation, but it is difficult at this time to determine their influence and/or longevity.

Airlines will continue to consolidate their control over their ticket sales and distribution. This means that airlines will attempt to route more customers to the Web and away from more costly options. Likewise, from the testimony to date, it appears that the airlines are signaling to each other and the industry that they have a collective strategic plan to move away from traditional GDSs and toward the Web and Orbitz- and most importantly Orbitz as a new GDS- as the primary data collection mechanism for airlines. Routing through Web sites and Orbitz is ideal for the hub carriers because

- 1. The airline's Web sites offer the least expensive method of ticket distribution since the Tom Sawyer Effect© is in place.
- 2. Orbitz is owned by member airlines, so any revenue generated through Orbitz is revenue generated for them, though indirectly.
- 3. If a travel agent in a hub city make a reservation for any hub airline using a new Orbitz GDS, all hub carriers will benefit from every other hub carrier since each will earn a part of the revenue via Orbitz, potentially reducing the need for not only travel agent commissions but also overrides since overrides are based on the desire of airlines for travel agents to route traffic to their airline. If each uses the same Orbitz GDS, then no matter the airline, each airline will gain a portion of revenue through revenue generated through a single conduit. In short, through a revenue sharing arrangement, airline owners could continue ticket sales and revenue generation through their Orbitz, but could remove travel agent overrides without fear of travel agents shifting business to another airline. This would effectively kill more travel agents, much of the traditional GDS revenues and

- leave one strong player, an Orbitz GDS. Once again, fewer options for the consumer leads to poor service, low quality, high prices and lack of innovation, all of which are negative in a capitalist oriented economic system.
- 4. An Orbitz GDS would allow a type of insurance policy for airlines in ticket sales and distribution where all costs and revenues are spread across all owner airlines.
- 5. By evolving Orbitz into the airline preferred GDS, online competition such as Travelocity.com and Expedia.com could be required to pay to access the Orbitz GDS, increasing the movement of consumers to Orbitz directly and away from the higher costs associated with Travelocity and Expedia due to their potential Orbitz GDS access costs. Removing Travelocity and Expedia from the scene would lead to only one major online travel distribution portal, and that distribution system owned by airlines. Forcing all consumers to one location on the Web for airline ticket distribution is a recipe for monopoly control and higher prices, decreased competition, decreased innovation, and a decline of the dynamic technology-leading US economy since monopoly control reduces the need for innovation.
- 6. Orbitz, because of its single connectedness with all member airlines, allows a fast and efficient means of indirect communication. If one airline debates raising fares, placing the information in Orbitz would trigger the other airlines to respond in one of two ways. One, match the rate hike, and all respond in kind. Two, do not match the rate hike, and the initial airline removes its rate increases. This practice through Orbitz and the initial launching of the direct-connect technology will make the practice of price signaling seamless. In short, owner-airlines will be able to directly and indirectly via the technology letting each other know what they are doing to maximize their premium pricing plans. Likewise, with all fares flowing through a central node, Orbitz becomes a virtual corporation of the owner-airlines, enabling a virtual merger of the big hub airlines, without the legal restrictions imposed by a direct merger consisting of asset sharing. This scenario is very problematic for not only the consumer, but also the US economy as a whole, which is driven in part by technological innovation. By allowing previously competing entities to collaborate leads to the strong temptation of

collusion which airlines with a premium pricing philosophy will leverage to maximize profitability. With a virtual merger through Orbitz, airlines WILL NOT push the technology envelope in order to serve more customers, improve service, improve quality, and lower prices. This negative environment will lead to a stagnation in a part of the US airline industry. The potential density of this new virtual mega airline to challenge discount carriers like Southwest—the only strong discount bulwark in existence—is also problematic.

Travel Agents-For travel agents, this is a brave new world. Travel agencies whose sole source of revenue has historically been airline ticket commissions and overrides must adapt to the new environment or go out of business. Agents and agencies that market themselves for their expert travel services and/or complete business services, will fill a needed niche and continue to grow and produce profits. Travel agents who have shifted their revenue stream from one business (airlines) to another (car rentals, cruises and hotels) are playing Russian roulette because the same economic forces and technologies which enabled airlines to cut commissions and draw passengers toward their own Web sites will be leveraged by the car rental companies, the cruise lines, and hotel chains. To succeed, travel agents must market themselves to the consumer directly, offering a value-added service that customers are willing to pay a premium to obtain. If travel agents could collectively market themselves to the customer as the premier gatekeepers, then the agencies could obtain more power over various travel and tourism companies vis-à-vis their position to the consumer.

Consumer-The ideal world for the consumer is competition, both in airlines and in ticket distribution in the US market. At present, Southwest Airlines is the most aggressive and competitive airline. Likewise, one cannot intellectually de-link information technologies, hubs and the airlines. Therefore, as hub airlines are quickly dissolving their relationship with travel agencies and adopt the Web and Orbitz as preferred platforms, red lights should go off and people should ask, why would major hub airlines, who ideally should be rigorously competing, coming together in a distribution network? Why are airlines, which created and owned controlling interests in most GDS now complaining about high

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GDS prices? The logical scenario emerging is an attempt at a legal consolidation of these large hub carriers. The time is now to address this issue by the oversight agencies

RECOMMENDATIONS

Recommendations to the committee—

- 1. Do not intellectually de-link airlines and information technologies, the relationship is seamless
- 2. Realize that airlines are information technology dependent; they will seek the maximum return and leverage on all technologies available. And given the history of hub airlines, their use of technologies, and their philosophy of premium pricing, collusion is a strong draw and possibility. Therefore, the environment needs to altered and set for strong competition between airlines and ticket distribution channels. Being proactive will remove the temptation environment that currently exists allowing a direct or virtual consolidation by airlines and their ticket distribution mechanisms, which is anti-competitive and anti-consumer.
- 3. Last, an imperfect analogy, but one that has lessons embedded, is a parallel between Microsoft and the US Airline Industry vis-à-vis other software firms and travel agents. Microsoft has created the dominant platform that all other software firms must write to because of its market dominance. When Microsoft releases a new operating system, like XP, Microsoft tells all the other programming companies to make their software compatible. A few key airlines in the US have a similar dominance in the marketplace and travel agents are TOLD that they must meet ARC standards and likewise are TOLD what their commission/override rates will be. A software company cannot write around Microsoft because there is no other structure or entity with its power. It would take vast sums of capital to create a competitor to even meet 10% of what Microsoft has in the market. Likewise, travel agents, to have an equal and balanced voice, would have to create their own airline and GDS to have a strong voice at the table. However, this also

would cost a great deal of capital investment. If the analogy holds, then there are two potential options:

- A. Microsoft is a positive competitive force, therefore by default, airlines are as well. Solution: Do nothing.
- B. Microsoft is anticompetitive, therefore change is required.

 Solution: The creation of an environment of competition in the software/aviation industry dissolving Microsoft's/Airline's joint ticket distribution systems (in short, break up Microsoft/Orbitz). This would encourage more competition for the customer, more innovation in the ticket distribution network, and reduce the potential for monopoly or oligopoly control buy a few select dominant airlines.

This concludes my testimony. I will be happy to address any questions the commission members may have.

References

- Butler, D. (2001). Deregulation, Information Technology, and the Changing Locational Dynamics of the U.S. Airline Industry, Dissertation, University of Cincinnati.
- Crandall, R. L. (2000). Phone Interview with David Butler, May 12th.
- Crandall, R. L. (1995). "The Unique US Airline Industry," in D. Jenkins, ed., *Handbook of Airline Economics*, McGrall Hill and *Aviation Week and Space Technology*.
- Department of Transportation (1998). *Proposed statement of enforcement policy on unfair exclusionary conduct by airlines*, April 6.
- Evans, P. and T. Wurster (2000). *Blown to Bits: How the New Economics of Information Transforms Strategy*, Harvard Business School.
- Hopper, Max (2000). Phone Interview with Max Hopper May 31, 2000.
- Kelly, G. C. (2001). Phone interview with David Butler.